Manitoba Monthly Surveillance Unit Report
Reported up to April 30, 2010

Highlights:

1. **Antimicrobial Resistant Organisms**

   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 64% of all non-STI/HIV related communicable diseases reported to Manitoba Health during April 2010.

   - The number of reported cases of MRSA was above the statistically expected range in April 2010 – 225 positive lab-confirmed cases reported; less than 212 expected in an average month.

2. **Sexually Transmitted & Blood-Borne Infections (STBBI)**

   There were 627 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in April 2010:

   - 530 reported cases of chlamydia (Ct) only
   - 58 reported cases of gonorrhoea (GC) only
   - 34 reported co-infections of Ct and GC and
   - 5 reported cases of syphilis

   Chlamydia has the highest incidence of reported STI. Females between the ages of 15 and 24 years comprised 46% of all reported chlamydia cases in the province.

   The five syphilis cases in April 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

   In April 2010, there were no cases of Hepatitis B virus (HBV), 27 cases of Hepatitis C virus (HCV) and 8 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**

   The number of reported cases in April 2010 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Diphtheria Cases – 1 positive lab-confirmed case reported; less than 1 expected in an average month.
   - Pneum. Septicemia – 18 positive lab-confirmed cases reported; less than 18 expected in an average month.
   - Tuberculosis - Non-Resp. – 6 cases reported (3 positive lab-confirmed cases); less than 5 expected in an average month. Case reviews show no apparent cause for this slight increase or any relationship between the cases diagnosed.
   - Yersinia Enterocolitica – 4 cases reported; less than 3 expected in an average month.

   The expected number of cases and range is statistically based on the number of reported cases during March, April and May, 2005-2009.

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

The number of Tuberculosis cases year-to-date may not equal the sum of cases reported for each month of this year. As new test results are received, there may be a change in diagnosis. Occasionally, diagnosis dates are updated, which also contributes to total numbers varying from month to month.

SUMMARY OF COMMUNICABLE DISEASE FOR April 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS	5	3	4	0-8	11	15
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-0		
005.8	B. CEREUS			0	0-1	1	
320.1	BAC. MENINGITIS - PNEUM			0	0-1	1	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	14	5		***	48	32
116.0	BLASTOMYCOSIS		1		***	2	1
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1		
005.2	C. PERFRINGENS			0	0-1		
008.43	CAMPYLOBACTER	23	11	17	3-31	73	58
558.2	CLOSTRIDIUM DIFFICILE	70	75		***	290	314
046.1	CREUTZFELD-JACOB DISEASE				***	1	
007.8	CRYPTOSPORIDIOSIS	3	3	1	0-3	9	6
061.0	DENGUE FEVER			0	0-1		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-2	1	4
032	DIPHTHERIA CASES		1	0	0-0		4
123.4	DIPHYLLOBOTHRIUM SPP			0	0-1	1	
008.0	E. COLI-VEROTOXIGENIC	1	5	3	0-8	14	14
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	8	9	9	4-14	33	35
320.0	H.INFLUENZAE (CSF)			0	0-0		
041.5	H.INFLUENZAE (OTHER STERILE)	2		0	0-1	2	
041.59	HAEM. INFLUENZAE (non-B)				***	1	
480.8	HANTA VIRUS			0	0-1		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		
070.1	HEPATITIS A	3		2	0-4	7	2
070.3	HEPATITIS B			1	0-3	2	
070.51	HEPATITIS C	28	27	32	16-48	130	101
487.1A	INFLUENZA A (NON-pH1N1)****	16			***	53	
487.1B	INFLUENZA B	4			***	36	
482.83	LEGIONELLA		1	0	0-1		1
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES			0	0-1		
088.81	LYME DISEASE			0	0-0		
084	MALARIA	1	1	1	0-4	6	4
055.9	MEASLES			0	0-0		
036.0	MENINGOCOCCAL CSF			0	0-1		
036.82	MENINGOCOCCAL ARTHROPATHY				***		2
036.2	MENINGOCOCCEMIA BLOOD			0	0-1		2
B95.6	MRSA	179	225	131	50-212	745	931
072.9	MUMPS		1	0	0-2	3	1
036.89	N.MENINGITIDIS OTHER			0	0-1	4	
728.86	NECROTIZING FASCIITIS		2	1	0-3	3	4
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-0		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	12	7	2	0-8	13	9
038.2	PNEUM. SEPTICEMIA	10	18	10	3-17	36	55
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.
** Mean +/- 2 standard deviations of the mean.
*** Data collected for less than 5 years.
**** Excludes Influenza A Pandemic H1N1 (pH1N1). There were no cases of pH1N1 in April 2010.

SUMMARY OF COMMUNICABLE DISEASE FOR April 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER			0	0-1	1	2
056.9	RUBELLA			0	0-1		1
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER		3	1	0-4	3	8
003.0	SALMONELLA	17	16	17	5-29	69	95
120	SCHISTOSOMIASIS			0	0-0		
004	SHIGELLOSIS	1	2	1	0-3	13	9
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-0		
041.1	STREP PYOGENES - OTHER	7	3		***	31	30
711.0	STREP.PNEUM.ARTHRITIS			0	0-1		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-1		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES			1	0-5	4	4
037	TETANUS			0	0-0		1
130.9	TOXOPLASMOSIS			0	0-1		1
124	TRICHINOSIS			0	0-0		
086	TRYPANOSOMA CRUZI			0	0-0		
013	TUBERCULOSIS - NON-RESP.		6	2	0-4	7	12
010	TUBERCULOSIS - PRIM.	3	1	2	0-6	4	1
011	TUBERCULOSIS - RESP	12	12	10	4-16	34	27
021.9	TULAREMIA			0	0-1		
002.0	TYPHOID			0	0-1	1	1
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	4	30		***	19	63
005.4	VIBRIO PARAHAEMOLYTICUS				***		
070.59	VIRAL HEP. OTHER				***		
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL Syndrome				***		
008.44	YERSINIA ENTEROCOLITICA	2	4	1	0-2	2	4
		425	**472**			**1714**	**1854**

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR April 2010

ICD9		<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing age/gender	Total
		F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS								1									1	1										3
038.0	BETA STREP SEPTICEMIA		2																1						1		1		5
116.0	BLASTOMYCOSIS																1												1
008.43	CAMPYLOBACTER			2	1					1				1	1	1					2	1	1						11
558.2	CLOSTRIDIUM DIFFICILE	2										1				5	1	3	2	6	6	6	4	4	9	21	5		75
007.8	CRYPTOSPORIDIOSIS									1		1							1										3
032	DIPH. CASES													1															1
008.0	E. COLI 0157				2							1		1		1													5
007.1	GIARDIA LAMBLIA			2	2	1								1	1			1			1								9
070.51	HEPATITIS C											3	1	1	1	1	4	3	5	2	4					1		1	27
482.83	LEGIONELLA																		1										1
084	MALARIA																		1										1
B95.6	MRSA	6	8	15	11	10	7	7	5	9	9	10	6	9	11	12	8	3	8	7	5	6	14	8	7	17	7		225
072.9	MUMPS																		1										1
728.86	NECROTIZING FASCIITIS																				1				1				2
033.0	PERTUSSIS		1	1	1	1	1		1	1																			7
038.2	PNEUM. SEPTICEMIA	1	1	1	1						1								1	1	3	1	1	1	1	1	3		18
003.0	SALMONELLA					1			2	1	2			1	1		1	3		1		1		1		1			16
004	SHIGELLOSIS																2												2
041.1	STREP PYOGENES - OTHER ST				1												1		1										3
041.2	STREP.PNEUM.OTHER															1					1			1					3
013	TUBERCULOSIS - NON-RESP.													1		1				1		2				1			6
010	TUBERCULOSIS - PRIM.				1																								1
011	TUBERCULOSIS - RESP.							1	1	1					2	1	1	2	2		1								12
B96.8	VANCOMYCIN RES. ENTER.																			1	3	2	3	5	6	7	3		30
008.44	YERSINIA ENTEROCOLITICA						1							1		1		1											4
		9	12	21	20	13	9	8	10	14	12	16	7	17	17	24	19	17	25	19	27	19	23	20	25	49	19		472

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR April 2010

ICD9	Disease/Infection	Winnipeg	Brandon	N.Eastman		S.Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP**	Missing	TOTAL
Case Referred to:*				F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P				
006.9	AMEBIASIS	2	1																				3
038.0	BETA STREP SEPTICEMIA	2									1		1						1				5
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	5	2				1				2				1								11
558.2	CLOSTRIDIUM DIFFICILE	41	5		1		3		5		4		8		2		2	2	2				75
007.8	CRYPTOSPORIDIOSIS	1					1						1										3
032	DIPH. CASES																	1					1
008.0	E. COLI 0157	2					2				1												5
007.1	GIARDIA LAMBLIA		2				1		1		3		2										9
070.51	HEPATITIS C	17	2					1					1		3				1		2		27
482.83	LEGIONELLA								1														1
084	MALARIA														1								1
B95.6	MRSA	73	4	4	1		1	1	7		3		6	1	1	1	14	100	8				225
072.9	MUMPS	1																					1
728.86	NECROTIZING FASCIITIS	1																1					2
033.0	PERTUSSIS																	7					7
038.2	PNEUM. SEPTICEMIA	11											1		2		2	2					18
003.0	SALMONELLA	10	1				3				1							1					16
004	SHIGELLOSIS																	2					2
041.1	STREP PYOGENES - OTHER ST	1													1			1					3
041.2	STREP.PNEUM.OTHER	2					1																3
013	TUBERCULOSIS - NON- RESP.	2											1					2	1				6
010	TUBERCULOSIS - PRIM.																	1					1
011	TUBERCULOSIS - RESP.	10																2					12
B96.8	VANCOMYCIN RES. ENTER.	23			1				3				1		1				1				30
008.44	YERSINIA ENTEROCOLITICA	3					1																4
		208	17	4	3		14	2	17		15		22	1	12	1	18	122	14		2		472

* F=Federal Jurisdiction (First Nations and Inuit Health) P=Provincial Jurisdiction
** OOP=Out of Province

STBBI Infection Summary Report - April 2010

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2009**	**2010**	**2009**	**2010**
All Chlamydia Infections	559	564	2330	2244
All Gonorrhea Infections (including PRNG)	100	92	446	346
All Syphilis Infections*	2	5	16	29
Gonorrhea & Chlamydia Co-infections	47	34	203	152
HIV	12	8	42	42

Total Number of STBBI Cases by Age and Gender - April 2010

	<1		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 49		50 - 59		60 - 69		70 - 79		80 +		Missing	Total
Disease Name	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**age/gender**	
Chlamydia Only Cases					1		8		130	34	114	83	49	29	30	28	8	6	3	4	1	1				1		530
Gonorrhea Only Cases									11	2	8	6	10	5	6	3	1	5		1								58
Syphilis Only Cases											1					2	1	1										5
GC and CT Cases							1		7	3	11	4	1		4	3												34
Total					1		9		148	39	134	93	60	34	40	36	10	12	3	5	1	1				1		627
HIV									1		2			1	2			1		1								8

Regional STBBI Distribution - April 2010

Disease/ Infection	**Winnipeg**	**Brandon**	**N. Eastman**		**S. Eastman**		**Interlake**		**Central**		**Assiniboine**		**Parkland**		**Norman**		**Burntwood**		**Churchill**	**OOP*** **	**Missing**	**TOTAL**
Case Referred to:**			**F**	**P**	**F**	**P**	**F**	**P**	**F**	**P**	**F**	**P**	**F**	**P**	**F**	**P**	**F**	**P**				
All Chlamydia Infections	288	24	20	10		15	10	11	1	27		18	5	10	2	36	64	18		5		564
All Gonorrhea Infections	43	1	6	1			2	1							3	8	16	7		3	1	92
All Syphilis Infections	5																					5
GC and CT Infections	16		2				1									5	8	1		1		34

* The five syphilis cases in April 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.
** F=Federal Jurisdiction (includes First Nations and Inuit Health) P=Provincial Jurisdiction
***OOP=Out of Province